THE MARYLAND FARMER

—DEVOTED TO—

Agriculture, Horticulture, Live Stock and Rural Economy.

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KNIGHTS OF LABOR CONGRESS.

The report of the committee of the K. of L. appointed at Cleveland to visit Washington, has been made to the Assembly of the Knights of Labor at Richmond, and the committee recommend the appointment by the Knights of Labor of a congress of their body to hold its sessions in Washington, and to secure legislation in their favor. This is one of the principal recommendations of the report. They propose that certain of their "best speakers and debators" shall form this congress of labor, and exert their all-powerful influence upon the "wily politicians."

The MARYLAND FARMER, as our readers very well know, has from time to time advised the organization of all classes who have felt themselves unjustly oppressed, as one of the best methods of protection and of securing their just rights. We have never objected and we do not now object to any of the organizations in existence designed by their projectors for this purpose, much less are we disposed to criticise every little method of proceeding which these organizations may adopt for these ends.

When, however, we see any one class, wielding a great power, deliberately proposing to interfere with the regular work of the U. S. government, for the purpose of turning it to their advantage at the expense of the rest of the people, we feel called upon to show our dissent. We have always been opposed on principle to anything like class legislation—to any class having the control of the government. The government belongs to the people at large and not to any one class. When turned into the channel of a particular class, it no longer is the government we are willing to support; it fails to represent our idea of a government of the people.

We think it would be just as bad for a congress of the Knights of Labor to control the government, as for a congress of Rail Road presidents, or a congress of Churches, or a congress of Masons, or Odd Fellows, or Grangers. Any class designing to interfere with the regular processes of the government and to turn it into their private channels, usurps a power which is

at war with the principles on which the government of our country is founded. It proposes a revolutionary movement in favor of its own class. If Knights of Labor propose to do this, they act at their peril; if Farmers propose to do this, they act at their peril; if merchants propose it, they act at their peril. It is the beginning of anarchical proceedings, for when the various classes organize their congresses at Washington to control legislation, it is the first step in a war which in its confusion will bid defiance to all order. It is no argument to complain that the U. S. Congress is composed of a set of men who disregard the plainest principles of honor and right for the sake of office, and the emoluments of office, for the remedy of this state of affairs is with the people. They must send representatives who will consider the best interests of all classes of our countrymen and act accordingly.

As we said in the beginning, we believe in organization for protection and have repeatedly urged farmers to organize, that they may preserve their just rights whenever they are imperilled, that they may not be over-ridden by rail road corporations, or by any species of monopolists. Still, we do not believe these organizations are justified in usurping a power which will oppress others, and we would oppose any exercise of power tending to this end.

Great danger is imminent when any organized body believe themselves to be so strong and united that they can venture to dictate to the U. S. Congress what they shall do, or forbear to do. It is on this ground that we think it very unwise for the Knights of Labor to take any steps in the directions proposed by this report. That they should appoint a committee to represent their wishes to the proper congressional committee is proper, or to place their grievances conspicuously in view of the congressional committee which should recommend relief, would be proper. But the congress they propose, we think very unwise, a very short sighted proceeding, which will in a great measure estrange from them the sympathies of the great body of the people outside of their order, who are now wishing them well.

As soon as they organize as a political party, they will find themselves in a great minority, and can only become a body of voters to be used by the "wily politicians" whom they denounce. We feel that the attempt to educate the Knights of Labor, to form a distinct political party, and to support meanwhile a congress of their own at Washington, is a very great step in the wrong direction. We are confident, too, that the American people will not look favorably upon such a movement.

KEEPING SEED-CORN.

Farmers are periodically given advice about the gathering of seed-corn and doubtless know well enough how to gather it, whether they do as they should or not; but it is very seldom that anything is said about keeping the corn. It is true that on the gathering of the corn it is often recommended to suspend it from the ceiling of the kitchen. But there is a large and constantly increasing number of women in this country who would make it decidedly interesting for any man who would undertake to suspend corn from their kitchen ceilings. Hanging the corn from the ceiling was all right as long as the rafters were there, and bare, but now, when the ceilings are nicely kalsomined, the advice to hang the corn above the kitchen stove is sadly out of place. Nor do I think the suggestion was ever a good one. There are too great extremes of temperature and not enough moisture above that stove. Above all things, seed-corn should be kept dry. But being sus-

pended for six months in a very dry, hot atmosphere may so dry the germ that it will be very slow to start into life; may accomplish what, under ordinary conditions, might require as many years—destroy the vitality of the germ altogether.

The keeping of the corn is as important as the gathering of it. It is true that good keeping will not make good seed of poor corn, corn not properly selected, but on the other hand, poor keeping will destroy the best seed. The secret of good keeping lies in getting and keeping the corn dry. A very low temperature will not injure the germ if it is not surrounded by moisture, whereas a temperature no lower than the freezing point will destroy enough germs to make the corn unfit for planting if it is damp at the time. The corn must be well cured after it is gathered, and for curing there is no better place than some outbuilding where there is a free circulation of the air. The corn should be spread out not more than one ear deep on boards some distance from the ground, if near the ground it will be very slow to cure, as it will absorb moisture from the earth. Lay boards on barrels and spread out the corn on these boards. Often it requires corn longer to cure out than a person supposes. Some few years ago a very careful farmer gathered a fine lot of seed-corn in the fall, and, as he thought, cured it out thoroughly before he put it away for the winter. One day in the winter he went to look at it, and when he uncovered it was greatly astonished to find it covered with frost, it had not absorbed the moisture after being put away; the moisture had always been in it. After corn is completely cured out it matters little how or where it is kept, so that is does not absorb moisture and vermine do not infest it, of course very low temperatures are to be avoided, yet cold will have little effect upon it if it is perfectly free from moisture. It is the combination of cold and moisture that proves fatal to the germ.

PLANTING FRUIT TREES.

November is the great planting month in the Southern States, and a few hints as to the best way to insure success will be reasonable, and we trust profitable. As a general rule the best success will follow when the trees are obtained from the nearest respectable nursery, where tree culture is understood. One can go there with their own vehicles, have them freshly dug, pack straw or other damp material in about the roots, and get them again in the ground without any drying of the roots or delays that are almost inseperable from a long distance away. Even where it is not desirable to take away one's own trees, and the nurseryman has to deliver, it will pay to go and select them yourself, and the nurseryman will deliver within a reasonable distance in fresh and good condition. Keeping the roots from drying up, between the time of digging and planting, is half the battle. If we had a choice between a badly dug tree and one whose roots had been permitted to get dry, we should take the former, though both are well worth looking after. If trees are packed as soon as they are dug, and packed as good nurserymen know how to pack, there is indeed no reason why trees should not go a thousand miles as they often are sent these distances. It is when dealings are had with irresponsible men, rather than the distance, which makes so many trees failures. Men who profess to be agents of respectable firms, are simply often but pedlars, who buy the cheapest kind of trees, pack them themselves, and often let them get half dry before they get into the cases. These men have not much conscience in either quality, condition or price.

In this selection of trees it is of good service to get trees that have not been starved in the nurseries. It is bad policy to have trees that come from patches

grown over with grass, or have in any other ways been neglected. A half starved tree is much more likely to die in transplanting than one which has not been neglected.

Of course the rules often given about spreading out roots, and poking the dirt in and about the roots tight and firm, are of some value, but chiefly on account of this condition of things. The roots have to get their moisture from the earth, and if the earth does not touch the roots, they dry themselves, instead of draw moisture for the stem. So pruning at transplanting is a benefit, because there is less of branches to dry out, as, no matter how carefully a tree may be transplanted, there is some loss or dryness of roots, and so a difficulty of keeping all parts moist.

It will thus be seen that tree planting is a simple thing. It is little more than care in keeping the roots from drying out.

FATTENING HOGS.

Men who grow hogs largely for the market are no doubt well acquainted with their business, and understand all its economical points; but among the readers of the *Journal* there are also a great many small farmers who will be glad of suggestions upon this subject.

In fattening hogs, early feeding is an item of very great importance. And it is right here that too many farmers fail. They do not begin to feed their hogs early enough in the season. All through the warm weather of early autumn they feed pumpkins and some soft corn, small potatoes and other light food, and do not begin to feed heavily until cold weather sets in. It is a much better way to commence feeding meal, or abundance of soft corn, as soon as the 1st of October. One bushel of meal fed when the weather is mild will probably produce double the pork as the same quantity of grain fed during the winter. In very cold weather, a large part of the food is used to keep up the animal heat, and only a little of it can be spared for the production of meat.

Liberal feeding is also one of the indispensable requisites to success in fattening hogs. And here a great many farmers make a serious mistake. They wonder why their hogs do not take on flesh more rapidly, when their only trouble is due to the fact that the animals have only a little more food than enough to keep them alive. There is no surplus for the production of fat. If all the food is consumed by the natural waste of the system, it is easy to see that no increase in the amount of flesh can be made. In order to fatten hogs rapidly, they should have nutritious food in as large quantities as they will eat and digest, with some coarse food to keep them healthy. The attempt to fatten hogs on short rations is utterly useless. The man who makes any such experiment will find the truth of the proverb, "from nothing nothing comes."

In order to have the best success in fattening hogs, it is also necessary to provide them with warm, dry pens. They will live in cold pens and muddy yards, but they will not fatten readily, and they require a great deal more food than if provided with comfortable quarters. Although the hog will sometimes wallow in the mire, he appreciates a warm, clean nest as well as any other animal. There is always a very close relation between the comfort of animals and the profits of their owners, and what conduces to the one is likely to increase the other.

To the Editor of the Maryland Farmer.

THE COTTON CROP.

The annual report of the National Cotton Exchange of America puts the 1885-86 cotton crop at 6,575,691 bales. The crop of the preceding year was 5,706,165 bales; of 1883-84, 5,713,200 bales; and of 1882-83,

6,949,765 bales. It is worthy of note that while the crop of 1885-86 exceeded that of 1884-85 by 15 per cent, during this time there was a decline in export price of less than seven per cent; and this was a period, too, of general decline in the prices of farm and other products. A decline of only seven per cent. in price may be a serious thing to producers, as it may be all the margin between profit and loss; yet last years crop must have been more profitable than the crop of the preceding year, since the increase in yield was more than double the decline in price. The report shows that we were right in saying that the South is not producing too much cotton. There will be an opening always for a crop equal to the largest we have yet produced, *and at a price that will be profitable if we employ the best methods in producing it.* The fault lies not in the amount of cotton we produce, but in our methods. We have allowed the growers of corn and of beef to outstrip us. We must originate and practice better methods, and it is to be hoped that inventive genius will give us implements and machines equal in labor-saving and in quality of work done to those now used in the growing and preparing for market of wheat, oats and corn. And with our cotton we must raise supplies for man or beast. Not less cotton, but more farm and garden "truck."

It is a note worthy fact that the consumption of southern mills is steadily growing. Of the crop of 1885-86, southern mills took 357,478 bales; of 1884-85, 299,383 bales; of 1883-84, 321,066 bales; and of 1882-83, 298,343 bales. This is as it should be. By manufacturing our cotton goods at home we save freight on the raw material to foreign mills; we save transportation charges on the manufactured goods from the foreign mill back to us; we save several middlemen's commissions, and the profit there is in manufacturing the goods is kept at home, and labor is afforded to our working people. We have all the conditions for the economical manufacture of cotton in the South. Several southern states are admirably situated for this manufacture, and it is bound to grow, and as surely as home manufacture grows it will be to the benefit of the grower. Home consumption, will increase and prices at first hands will be strengthened.

Northern mills are also increasing their takings. Last year they took 1,781,478 bales, while in the great crop year of 1882-83 they took only 1,759,703 bales; in 1884-85 they took 1,437,063 bales, and in 1883-84, 1,537,1666 bales. Increased consumption by northern mills must also tend to strengthen prices beyond what they otherwise would be. Another feature is the small stocks held from one crop-year to another. At the close of the last crop-year the stocks on hand aggregated only 168,677 bales—a small number compared with the production of that year. And at the close of the last crop-year, cotton goods were sold up close at the mills. All in all, cotton will compare very well with other farm crops in promise of profitableness, for of late fair profit in any branch of farming, North or South, has been obtained only by the practice of the best methods in production and by judicious management in handling and selling, and we must confess that in some lines of farm production methods and management are better than they are on the cotton plantation.

Ill. J. M. S.

To the Editor of the Maryland Farmer.

BOOTS AND SHOES.

Our boots and shoes wear out all too soon, some complain that leather is not so good as it was forty years ago; and likely there is more in this than the human disposition to magnify the good qualities of the "good old days." Doubtless more deception is practiced now than in the thirties or forties. Poor leather is covered up; and leather is now so successfully "doctored" that even experts are deceived. In buying boots or shoes it is well to avoid those highly polished. Glue and polish are used to hide poor leather. Good leather need not be hid and is not hid. The plainest shoe or boot is usually the best. Fancy gew-gaws are used to detract attention from the leather and to sell it. The boot or shoe that has the least show usually gives the most service. This, of course, refers only to articles of the same grade. Cowhide shoes are not so nicely made and trimmed as patent leather shoes,

but of two cowhide or of two patent leather shoes, the one plain and the other glued, polished and gewgawed, the first will last the longer.

Coarse, heavy leather does not wear the longest, even on the farm. Of course very fine, thin leather will not do, for it will not keep the feet dry and warm, and manure and mud will soon rot it out. The best leather for boots and shoes for country wear is a medium leather, perhaps nearer the coarse and heavy than the fine and light. No matter what the weight of the leather if its texture is coarse it is unfit for boots or shoes. It will not wear well, and this open leather will admit moisture and cold, hence is an inveterate and by no means a mean enemy of health. It is such leather as this which come to the store best oiled and polished, the oil and polish being put on to hide the open pores. The desirable leather is a close, compact leather, one that you cannot easily stretch; that shows no pores when all the polish is taken off. This sort of leather always wears well, it wears smooth, does not "rough up," and it keeps out moisture and cold. It wears better than open leather, and if of about medium weight wears better than cow-hide. Cowhide gets hard and breaks, it is never comfortable on the foot and is not the most economical.

But the best of leather will not wear well if abused. Exposure to mud and manure and snow will harden and rot the leather unless its pores are kept filled with oil, which keeps out air, moisture and earth. Oiling boots and shoes once a week is none too often. The best application is a mixture of two parts pure neat's-foot oil (two-thirds of what is sold as neat's-foot oil is not neat's-foot oil) and one part of beef tallow. First brush the leather clean, then wash it with luke-warm water, set it where it will dry not too rapidly and apply the oil while the leather is perceptibly damp, do not have the oil hot, but warm enough to make it run easy, and do not depend so much upon heat to dry it in as upon rubbing. Elbow grease is a good addition to the oil and tallow. Oiling not only increases the wear of the leather but makes it wear efficient, for the pores being filled with oil, moisture and air cannot penetrate, and the boot or shoe will keep your foot warmer and dryer. Aside from this, the oil makes the leather soft and pliable, and the greater ease to your feet is worth all the trouble of oiling.

Quincy, Ill. JOHN M. STAHL.

OUT OF EMPLOYMENT.

We hear much complaint from all parts of the country, of people—both men and women—out of work—they can't get employment by which to support themselves.

Undoubtedly, there is real grounds for much of this complaint; but much also of this want arises from so many refusing to do anything unless they can get large wages; now, it is better to work for small wages rather than do nothing and be in want—running around in idleness; it is better to make one-half dollar rather than nothing; then make two, three, four or more half dollars soon as you can.

There are thousands of people in Maryland and other States who want the MARYLAND FARMER, and who would take it if pleasantly solicited and shown a copy; and there are hundreds of men who have no work, who might make from one to three, four or five dollars per day by lively canvassing through the country and cities to obtain subscribers for this magazine; we want 10,000 more subscribers, and will allow liberal commissions.

There is not a county in Maryland, Delaware or the Carolinas that has not a thousand or more persons who need and can easily pay for the MARYLAND FARMER; and any active person, by lively and courteous canvassing could obtain an average of at least ten subscriber a day—often more—from now till next March, and that would give him $2.50 per day for wages; besides some advertisements could be obtained from business men.

To any one who wishes to go earnestly to work in this business, and will furnish us with good reference, we will supply plenty of specimen copies, and authorize to canvass in any county or state desired.

The MARYLAND FARMER is certainly the best farmer's paper in this State, and has been longer published, without a cessation, than any other agricultural paper in the Southern States, and is, therefore, firmly established and reliable.

Now is the time for young men and others to take hold and commence. Thoroughly work up one county first, where you are known and know many people; then take another county, and so on, as long as you can succeed and no better employment offers.

We are ready to furnish the paper, so that you have no occasion to complain of want of work by which to earn your living.

AGRICULTURE.

PARIS, October 4, 1886.

The french law having recently decreed hog measels to be a disqualification for marketable pork, the subject is now creating a good deal of attention. By measles or "spotted sickness," is understood a malady of the cellular tissue of the pig, characterized by the presence in the flesh of numerous vesicules, which are really nothing else than the larva of the tape worm in man—the *cysticercus* of the *tænia soluim*, is the same as that of the *cellulosæ*.

The parasitical disease of measles, formerly ranged as a form of leprosy, has been well known in antiquity. Its name too, comes from the old German *measel*, a pustule or spot. The disease is presumed to be the cause of the prohibition by the levitical law to the Jews not to eat the flesh of the hog, apart from its being the unclean animal—in the meaning, that while it divided the hoof, it did not chew the cud. Moses likely remarked measly pork produced skin eruption, or a species of leprosy. The Jews abhorred the flesh of swine and alluded to it as being only the meat for idolaters, who made "broth of the abominable thing." Eleazer, an aged scribe, when compelled by Antiochus to taste pork, spat it forth, preferring rather "to die gloriously than to live stained with such an abomination. The Egpytians, Mosleins, and other Eastern nations were forbidden to use swine flesh. Some allege that the Egyptians did not eat pork because the pig was ranked as a sacred animal, its snout rooting up the ground, having taught man the art of plowing, as the little nautillus is said to have "taught us to sail, to spread the thin oar, and catch the driving gale." The only agricultural operation pigs execute in Palestine beyond dispute was, when wild boars, they tore up or trampled down vineyards. If the Jews did not breed hogs, they at least herded them—probably for the Gentile market.

Littri does not consider measly pork as positively unfit for consumption; he merely observes it makes bad soup and that the flesh is tasteless. However, such diseased meat has always been regarded as a bad alimentary substance, and since 1716 very severe penalties have been decreed against those who sold it. A special corporation was given a charter, empowering its members to examine all affected swine flesh sent to the market. Pig measles—which must not be assumed as similar to human measles, is not so general a disease now as formerly, thanks to more careful breeding and also to pigs being reared under superior hygienic conditions. Not more than one per cent of the total of hogs reared in France are tainted with the disease.

The Percheron Horse.

The breeders of Percherons are urged, that while securing good mares—and the best stallions as a matter of course, not to overlook the equally essential point of having abundance of food, and of a good quality all the year round. In meadows where a medium sized animal will prosper, a larger built one will not succeed. The want of appropriate food will affect the gestation of the mare, and later, the foal will not have an adequate supply of milk to secure the basis of its desired stature and marketable bulk. The advocates of pure Percherons urge the rejection of all English as well as Arab blood—excellent for saddle-horses, but unsuitable for animals destined for omnibusses, spring vans or cavalry. Practice selection among the best type of Percherons, to keep up the excellency of that race, but do not cross it with foreign blood. If you want vigor and vivacity, rely on oats.

Attention is also being given to rear horses free from curbs, those hard tumors on the articulations, hocks, the knees, &c. If these excressences be due to an accident, a fall, over exercise, the matter is of secondly importance; if otherwise, they indicate a lymphatic and feeble constitution, and the mare so affected, should be avoided. So ought too large, or too small, or malformed hoofs. While on this subject, French breeders seem to ignore the importance of rearing for themselves good breeding mares. When they have an attractive filly, they are certain to part with it if offered a tempting price. By attending to this point the farmer can impart fixity of qualities to the offspring. Replace a good mare always by one of her own good daughters.

A breeding mare should not necessarily be fat, neither ought she to be in bad condition. If covered when in the latter state, the gestation stage will certainly be affected. It is not so much the quantity of food that requires attention as the assurance that it be suitable. Abundance of inferior fodder presents no great advantages. It would be prudent also, particularly in the case of brood mares, to see the water supplied to them is good. Ponds of the cess-pool category should be avoided as it is now established, water is the principal vehicle by which disease-germs gain admission into the animal economy. Flowing or river water is preferable, and when this is wanting, the next best is that from wells; only when the latter is drawn, expose it for a short time to the air, and stir it up to let enter what it is deficient in—air. In summer, well water ought to be drawn three hours in advance, as its exceptional coldness might affect mares in foal. It is necessary to bear in mind that there are good and bad meadows, and what may suit cows, may not mares. Bad grass tends to develop unvigorous and lymphatic foals. As some animals eat with more avidity than others, it is prudent the first time a mare is put out on grass, to do so only after her morning feed, then bring her in at eventide, continuing this plan for two or three days before completely leaving her in full field liberty. Even with those that have to be house fed, the racks ought not to be laden with green soiling, which induces forced or ravenous feeding; the mare then gets into flesh, or acquires corpulence, at the expense of vigor and vivacity, developing coarse hair on the legs, mane and tail, thus imparting a common look. A diet plentiful and healthy, but not excessive, modifies the size, the form and the temperament of all animals.

To Keep Sweet Potatoes.

Sweet potatoes can be kept by placing them in bulk in a bin or box (the more the better) without drying, and maintaining for them a uniform temperature of 45° to 50°. Putting something between, among, or around them may serve to keep them at the proper temperature, but it is of no value whatever aside from this; and if it should retain dampness, it will be a positive injury. After the sweat takes place, say in three or four weeks, scatter over them a light covering of dry loam or sand. In this way it is easy to keep sweet potatoes for table use or for seed, as well as "the inferior and less nourishing irish potato." Another way is to pack in barrels, and pour in kiln-dried sand until the intervals are full; or boxes of uniform size, piled up on the side of a room where the temperature never falls to the freezing point, which is a condition of first importance. This wall of boxes may be papered over, and left undisturbed till spring, when the potatoes will command the highest prices.

To Keep Parsnips.

The almost universal practice among farmers is to allow their parsnips to remain in the ground through winter, just where they were grown. We believe the quality of this root in improved by being frozen, or at least kept cool, but it is not necessary to leave them in the open garden during winter, where, if the ground remain frozen, they cannot be got at until it thaws in spring, and then used in a very few weeks or not at all. If the roots are dug up late in the fall, leaving all the tops on, then carefully heeled in thickly together in rows, after which cover with a little coarse litter, they can be reached whenever wanted during winter.

DEER CREEK FARMERS' CLUB.

HOW PROTECTION PROTECTS FARMERS.

The Deer Creek Farmers' Club held its October meeting at the farm of the Secretary, Mr. Wm. B. Hopkins, near Lapidum, Mr. R. John Rogers, President, was in the chair.

How Protection Protects the Farmer.

After supper Mr. Wm. Dean, a woolen manufacturer of Newark, Del., in a brief but forcible speech, explained how the high tariff affects the farming interests of the country.

Mr. Dean said that as a woolen manufacturer his interests would not, probably, be in a line with those of the farmer, but as a patriotic American citizen, he wished to see laws enacted that would secure the greatest benefit to the greatest number of our people.

We raise a surplus of agricultural products, which finds a market in foreign countries and the price is regulated there.

We export our surplus of 100,000,000 bushels of wheat, which comes into competition with wheat from India, raised at a cost of 10 cents a bushel. The price abroad for our surplus products regulates the price of the entire crop.

The American wheat grower said Mr. Dean ought to be able to buy supplies for his family where he sells his wheat. He showed that by the present high tariff cloth costing 50 cents a yard in Leeds, England, would cost $1.27 to import, the duty amounting to 77 cents per yard.

We are dependent upon a foreign market to get sale for our surplus grain, beef, pork, &c. If it were not for this foreign outlet beef might be 2 cents per lb.

The tariff should be so regulated as to protect and benefit the masses, not the few. Manufacturers, by reason of their large profits, can pay higher wages than can be paid by farmers, and they therefore drain from farmers the best labor and leave them the refuge. Then protection compels the farmer to pay more than he ought to pay for the goods he needs, and thus the farmer's profits are cut at both ends by the tariff.

A great wrong is being practiced on the American people by the existing tariff. Take steel bars for railroads, for instance. In 1881 they could be bought in England for less than $25 a ton. We manufactured in that year 1,100,000 tons and sold them at an average of $61 a ton. Who got the the difference, $47,000,000, that the rails cost the railroads in 1881, in addition to what they would have cost if we had not a protective tariff? The steel rail Manufacturers. Why should they be protected at the expense of the rest of the people? That $47,000,000 must be paid by the people who use the railroads.

A duty has been levied on wool, but notwithstanding there was less wool raised in the region east of the Mississippi river in 1880 than there was in 1850. Why don't protection on wool encourage sheep-raising in those localities?

The protected people are getting high prices for their articles and are spending their money where they get the most for it. Will the U. S. Government allow farmers to do likewise?

We are producing cutlery out of steel imported from England, paying a heavy duty on it, and selling that cutlery in Sheffield and Birmingham in competition with English cutlery, and yet the price of cutlery here is double the price in England. Why? Because the protective tariff shuts out English cutlery.

We are in advance of England in manufactures, notwithstanding her cheap labor, and yet we must pay twice as much for our implements here as they can be bought for in England. All because of the protective tariff.

A vote of thanks was given to Mr. Dean for his interesting and valuable address.

A general discussion of the tariff question from the farmer's standpoint then took place.

Geo. E. Silver said that individually he is a free trader, but looking at the matter from a natural point of view, he did not believe free trade advisable. He was opposed to protecting the few at the expense of the many.

James Lee was in favor of protection. It gave employment to a great many people, enabled employers to pay high wages and thus indirectly benefitted the farmer.

John G. Rouse is a free trader. He believed in a man selling goods where he pleases. A satisfactory conclusion in re-

gard to the tariff cannot be arrived at except by experiment.

Benj. Silver, Jr., saw strong arguments on both sides and thought the general drift of sentiment in the country is towards high tariff.

Free trade would drive many manufacturers out of business and throw labor out of employment which would eventually be turned towards agriculture, still further increasing our surplus agricultural products.

Jas. B. Kenly was of the same opinion.

Johns H. Janney thought a reduction of the tariff would not affect the price of farm products, but we would have the world to buy and sell in. We could sell in the highest and buy in the cheapest markets, thereby increasing our profits. We have a high tariff and a depressed condition of business. Let us try a low tariff for awhile.

Geo. R. Stephenson is a free trader. He thought the time past whem American industries need protection by taxing the whole American people. A high tariff fosters monopolies. He did not think high tariff views are spreading.

Wm. Munnikhuysen is also in favor of free trade. The policy of our government should be the greatest good to the greatest number.

Col. Otho S. Lee said he held conservative views on the tariff. A tariff is indispensable but the duties should be on the luxuries not the necessaries of life. There is something radically wrong in the present tariff. A high tariff benefits manufacturers but does not add one cent to the laborer's wages.

R. Harris Archer also favored a revision of the tariff. Under the high tariff business is at a low ebb and could not get worse. He would like to see a low tariff tried.

John Moores thought the manufacturers of the country had profited long enough by a protective tariff and he wanted to see a tariff that would benefit farmers.

Geo. L. VanBibber was also in favor of a revision of the tariff, and mentioned instances of the queer effects following a change in the tariff.—The Trenton, N. J., pottery manufacturers got a prohibitory duty on china ware and capital rushed into the business.—When the duty on quinine was taken off the first result was largely increased sales and highest prices.

J. P. Silver thought the tariff should be equalized, but it is difficult to do this, because every man wants the advantage on his side. Whether the tariff is high or low, it does not seem to affect the prices on farm products. If we had no tariff business would be demoralized for eight or ten years.

The club will hold its next meeting at the residence of Mr. H. Spalding.—*The Ægis & Intelligencer.*

INFECTIOUS DISEASES.

SUGGESTIONS FROM THE STATE BOARD OF OF HEALTH FOR THEIR PREVENTION.

"On account of the unusual prevalence of diphtheria and typhoid fever in some of the rural districts of Maryland," the State board of health through its secretary, Dr. C. W. Chancellor, has furnished the following for publication:

PRECAUTIONS AGAINST INFECTIOUS DISEASES.

1. Whenever diphtheria, typhoid fever or any other infectious disease prevails or threatens to prevail, perfect cleanliness of premises and repeated disinfection of all foul places is of the first importance. In no yard or open lot, cellar or other place, should any collection of animal or vegetable refuse be allowed to remain. Privy vaults especially should be kept well cleaned and disinfected. Badly kept slaughter houses and filthy pig pens are the most fruitful sources of disease. Wherever animals are kept, daily cleansing and disinfecting should be enforced.

2. In order to guard against the harm which sometimes arises from disturbing heaps of offensive matter during warm weather, it is often necessary to combine the use of chemical disinfectants with such means as are taken for the removal of filth; and in case where the removal for the time is impossible or inexpedient, the filth should always be disinfected.

3. Special precautions of cleanliness and disinfection are necessary with regard to infective matters discharged from the bodies of the sick. Among discharges

which it is proper to treat as infective are those which come in cases of diphtheria from the nose and throat and in cases of typhoid fever from the bowels. The caution which is necessary with regard to such matters must, of course, extend to whatever is imbued with them, as sheets, clothing, towels, handkerchiefs, and other articles which have been used by the sick. These should be cleansed at once, either by being boiled in water or by being immersed in a disinfecting solution for two hours, or until they are ready for the wash-tub. The body of a person who has died of an infectious disease should be well washed with a strong disinfectant, and no public or church funeral should be permitted.

4. The discharges from typhoid fever patients should never be allowed to stand in proximity to drinking water, milk, or other food which may absorb the disease germs, and above all, they must never be cast where they can run or soak into sources of drinking water. Water used for drinking or culinary purposes should be free from animal or vegetable refuse; if tainted by leakage or filtration from sewers, drains, cesspools, pig-pens, stables, &c., it should not be used. But if the only water which for a time can be got is open to suspicion of dangerous organic impurities, it should be boiled before it is used for drinking, and then not to be drunk later than twenty-four hours after it has been boiled. Filtering of the ordinary kind cannot be trusted to purify water, but it is a good addition to other processes. The dangerous qualities of the water are not obviated by the addition of spirits. When there appears any probable relation between the distribution of diseases and the milk supply, the cleanliness of dairies and the purity of the water used in them should be carefully investigated.

5. Overcrowding should always be prevented. The sick room should, as far as possible, be free from persons who are not of use or comfort to the patient. Ample ventilation should be inforced. It is essential both for patients and for persons who are about them that the sick room and the sick house be constantly well traversed by streams of fresh air. Teachers should promptly exclude any pupil from school who has been exposed to a contagious or infectious disease.

DISINFECTANTS TO BE EMPLOYED.

For free and general use in privy vaults, sewers, sink-drains, water closets, stables, pig-pens, and on refuse heaps, &c., the following are the cheapest and most effective disinfectants and germicides known.

No. 1.—Chloride of lime, (bleaching powder,) 1 pound; water 4 gallons. Dissolve the lime in the water. This solution (4 gallons) will cost not more than five cents, or about fifty cents per barrel. A gallon or more may be used daily in an offensive privy vault, and such quantities as may be necessary in other places. In the sick room it may be used in open vessels. Sheets, clothing and other articles used by the patient should be immersed in this solution diluted (one gallon of solution to eight of water) for two hours, or until ready for the laundry. The solution is not poisonous and does not injure clothing.

No. 2.—Corrosive sublimate, one-half ounce; permangenate of potash, one-half ounce; water four gallons. The cost of this solution is about double that of No. 1. It is used in the same way and for the same purpose. The only advantage it has over No. 1 is that it is without odor. It is poisonous, but its bright purple color will prevent its being mistaken for any other solution.

No. 3. (Powder.)—Chloride of lime, one pound; corrosive sublimate, one ounce; plaster of paris, nine pounds. Pulverize the corrosive sublimate, and mix thoroughly with the plaster of paris; then add the chloride of lime by gradually mixing. Keep dry.

As an antiseptic and deodorizer this powder is unsurpassed. It is to be sprinkled one-quarter of an inch thick upon the excreta or matter to be disinfected, and subsequently moistened if the material is dry.

Copperas (sulphate of iron) may be used to arrest decomposition, but it is of small value for any other purpose. It is not efficient in the destruction of disease germs.

COST OF A TON OF HAY.

A correspondent of the *Lewiston Journal* has been figuring out the cost of a ton of hay, and finds that where land is worth $25 per acre, the hay will cost about $16

per ton. It is allowed that a ton of hay removes from the soil thirty-five pounds of potash, and eighteen pounds of phosphoric acid, costing at market prices $9.84. For other fertilizing material taken from the soil $1.60 is charged. Interest and taxes are reckoned at $2.50, and only $2.00 for cutting, curing and storing. If these figures are approximately correct, it will be seen that farmers who are selling their hay at ten or twelve dollars per ton at the barn, must be impoverishing their farms by so doing. Nor is there any doubt that this is the fact, for whenever we find men selling hay at low prices, without buying manure, we are pretty sure to find their farms running out. Even at the present low prices of milk and other dairy products, it is better to feed the hay than sell it at the prices named, for by so doing the farms can be kept fertile, and what income is received from the sales may be counted largely as the income from labor, rather than from the sale of the land itself. Some farmers who could get but ten or twelve dollars per ton for their hay at the barn, have found that by feeding it out to good dairy cows they can get at least $20 per ton for it, without the expense of baling it or hauling it to the railroad station. Very few farmers can afford to sell hay for less than $15 per ton, unless they can get manure at low prices and near by. They can do better to put a little more labor to it and sell in the form of a more highly finished manufactured article.

To Keep Onions.

Gather in fall and remove the tops; then spread upon a barn floor or in any open shed, and allow them to remain there until thoroughly dry. Put into barrels or small bins or boxes, and place in a cool place, and at the approach of cold weather cover with straw or chaff, if there is danger of very severe freezing.

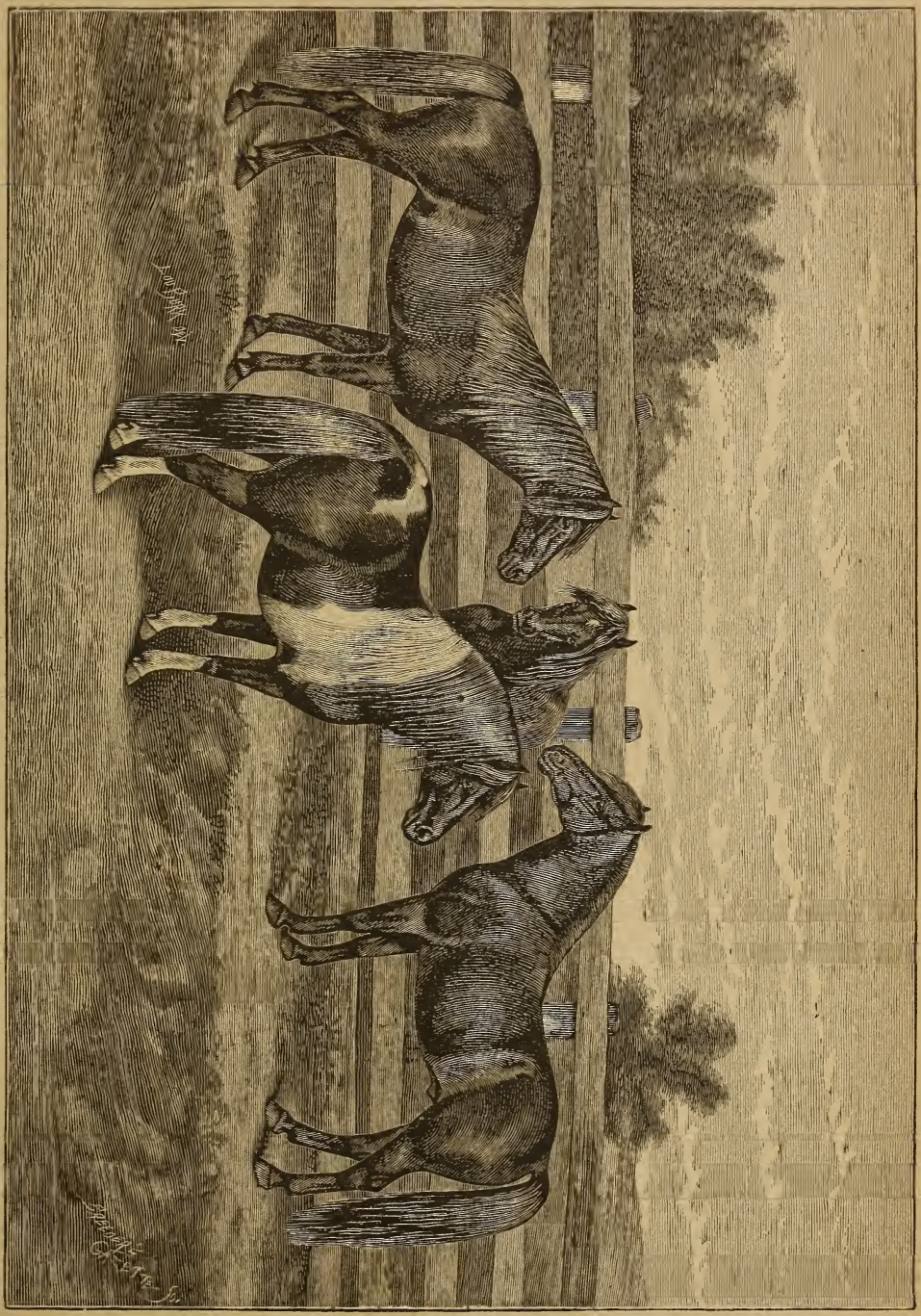
Onions are often injured in the winter by keeping them in too warm a place. They will seldom be injured by frost if kept in the dark, and in tight barrels or boxes, where not subjected to frequent changes of temperature. It is the alternate freezing and thawings that destroy them, and if placed in a position where they will remain frozen all winter, and then thawed out slowly and in a dark place, no considerable injury would result from this apparently harsh treatment. Onions should always be stored in the coolest part of the cellar, or put in chaff and set in the barn or some out-house.

LIVE-STOCK REGISTER.

SHETLAND PONIES.

Our engraving this month represents a group of Shetland ponies—a type of the horse kind that has never before been illustrated in THE MARYLAND FARMER. The group is the property of Eli Elliott & Co., of West Liberty, Iowa, who state that they with others of the family, were imported last fall for the purpose of engaging in their breeding on an extensive scale. The group was sketched by Mr. Lou Burk, the Breeders' Gazette live stock artist. The two animals in the centre are in form and general style perhaps more truly characteristic of the Shetland breed than either of the others. The stallion on the right is Robert McGregor, a beautiful mahogany brown, six years old, 41½ inches high, weighing 390 lbs., and in style, form, and finish resembles more nearly the high type of a trotting horse than an ordinary Shetland pony. The mare on the left is very much of the same style. The black-and-white mare in the foreground is called Pinto Maid. She is five years old, 42 inches high, weighs 400 lbs., and is said to be a perfect pet. The mare on the left is a chesnut, four years old, 41 inches high, weight, 375 lbs. The one in the back centre is highland Mary, a four-year-old, 42 inches high, weight, 380 lbs. She is a dark bay with very fine head, neck and ears.

The Shetland pony, like all the domestic animals of Shetland, is said to be of Norwegian origin, and had been maintained from time immemorial without any cross of foreign blood, until some time in the sixteenth century, when, by chance, some



GROUP OF SHETLAND PONIES, PROPERTY OF ELI ELLIOTT, & CO., West Liberty, Iowa.

Spanish vessels, with the admiral's stud of thoroughbreds on board, were wrecked on the dangerous coast, and at least a part of the Spanish horses swam to the shore, and it is that cross which is said to have stamped them with so much fleetness and endurance as well as the high spirit and perfect docility for which they are so famous. It is curious that the "Sheltie," as they call him at home, should have kept his form so well through all these generations of hardship and toil, but it is well known that symmetry is more inherent in small animals than in large. Having been bred, reared and trained for generations under adverse circumstances, has reduced his size, established his hardy type and general character for intelligence, probably beyond that of any other known breed.

CONTAGIOUS PLEURO-PNEUMONIA.

What is it, Its Symptons, What is to be done, &c

BY N. H. PAAREN, M. D., LATE ILLINOIS STATE VETERINARIAN.

SYMPTOMS.—In course of from three weeks to three months, or more, after exposure to infection, the first indication of the presence of the disease will be a rise of the temperature of the body. This may be definitely ascertained by inserting the bulb of the clinical thermometer into the rectum. The normal temperature of horned cattle varies from 100 2-5° to 102° Fah. When it rises above 103° Fah., the animal is diseased in some way. In the beginning of this disease there is a tendency to separate from the rest of the herd, when in the field; also slight listlessness, unequal external temperature, a less keen appetite, irregular in chewing the cud, slightly diminished milk secretion, occasional erection of the hair, and slight shivering. Then there is occasionally a slight, dry, short and single cough, especially after rising or drinking, or when emerging from the stable.

Gradually the cough becomes more frequent, harsh, and accompanied with more or less violent efforts, such as arching of the back, and extension of the neck and head. The coat becomes unhealthy-looking, the hair staring, especially along the back and loins. Pinching or pressure applied along the back, may cause the animal to shrink more than usual. The muzzle is alternately dry and moist, and the limbs, horns and ears variably cold or warm. The bowels become costive, the urin scanty and of darker color; the breathing becomes quickend, the pulse more frequent, and there is more or less slimy or sticky discharge from the nose. The animal becomes sensitive to damp and chilly weather, and seeks shelter under trees, stacks or in ditches, away from the rest of the herd.

A physical examination of the chest, by means of percussion and auscultation, will reveal more or less extensive organic changes and lesions, which, however, can only be properly appreciated by the professional observer. The pulse varies from 60 to 70 to 80 per minute, and the temperature rises to 104° F. or 106° F. The animal becomes more sensitive to pressure applied along the back, and especially to striking the ribs with the knuckles. The peculiar short, sharp cough is emitted, with the head and neck outstretched, the mouth open and the tongue protruding, while the body assumes a crouching position. The symptoms named, which greatly vary in prominence or intensity, and in fact may be apparently trifling as to attract only passing notice by the owner or attendant, and which constitute the first stage of pleuro-pneumonia, may continue for many weeks, when, often suddenly.

THE SECOND STAGE makes its appearance. This is ushered in by more or less intense fever symptoms. The pulse becomes quicker, even as high as 100 beats per minute. At the same time the breathing becomes more accelerated and labored, and more or less constantly accompanied with a grunt, especially if the pleura is affected. There is more or less shivering, with alternate hot and cold temperature of the horns, ears and limbs; the skin lies tight to the body; the muzzle is dry; appetite is lost; the bowels are very costive;

the urine more scanty and high colored, and the milk secretion ceases. The animal evinces disinclination to move, and does so with more or less stiffness. The act of swallowing liquids or solids excites coughing, which becomes more and more frequent, painful, and accompained with groans and moans. Pressure applied between the ribs and along the back causes the animal to crouch and grunt. The temperatuie rises to 107 Fah., or more. The animal now almost constantly stands in a fixed position, with the back arched, limbs extended, the elbows turned outward as far as possible from the chest, and the head outstretched. The animal is made to move with difficulty; breathes rapidly and laboriously, with expanded nostrils, from which as well as from the eyes, a thick fluid matter emanates. There is constant moaning and grinding of the teeth. Gradually the breath becomes very offensive; saliva flows from the partially open mouth, and there may be occasional twitching of the muscles of the flanks. The limbs, horns and ears are cold, and a more or less dropsical swelling appears between the jaws, and under the chest. When, from emaciation and exhaustion, the animal lies down, it prefers to rest on the brisket, or on the affected side, to facilitate the motions of the chest—in either position the head being extended as far as possible. More or less bloating and a very fetid diarrhœa in the last stage, and death may occur in from one to three weeks from the beginning of the second stage.—The above symptoms may prevail with more or less intensity, or with more or less rapidity of development.

The disease does not, however, always terminate fatally. Recovery may occur during the first or second stages; but as the normal condition of the organs is rarely regained, the recovery can only be regarded as incomplete, and is very slow, extending over many months, while the animal is constantly capable of communicating the disease among others in its vicinity.—*Prairie Farmer.*

A Remedy considered satisfactory for various kinds of insects in stored grain consists in placing an open vessel of bisulphide of carbon on top of the grain in a tight bin.

DISINFECTION IN PLEURO-NEUPMONIA.

Buildings and utensils which have come in contact with pleuro-pneumonia must be disinfected. Fire is unquestionably the safest application. That however, is not always practicable. At least parties would naturally be slow to apply the torch to a nice building. Do then the next best thing. Disinfect thoroughly everything that the virus has come in contact with. Remove all rotten wood and destroy it. Take out all the manure, litter and feed of all kinds from the stables and destroy them. Wash the floors and sides of the building with the following: Chloride of lime, half pound; crude carbolic acid, four ounces and water one gallon; add enough freshly burned quick lime to make a good whitewash. Apply it to all parts of the building, even the roof. Thoroughly wash all utensils and movable articles with carbolic acid, one-half pound and water, one gallon. After this is done close up the building and set a small furnace in the centre. Fill it with charcoal and then set it on fire. Then place on the charcoal a pound of the flowers of sulphur. Do not disturb the building for two hours. The places where the manure has been must also be washed with the preparation that has been advised for the walls and floors of the building. Fumigate the surviving herd with flowers of sulphur as prescribed in the previous article; and give each animal daily two drams of powdered copperas in meal.

We have thus devoted considerable space to this subject in this department and in our dairy department, not that we expect that any of our readers will ever have any reason in their own experiences to apply the knowledge which we have given, for we have not the slightest idea that the pleuro-pneumonia will ever spread over this country. But we have thought that it would be well enough to give the information, that in case of necessity it might be made available and also because there should be a greater familiarity with the history, progress and treatment of the disease. In closing we desire to again warn our readers against being frightened. If worse should ever come to worse not even then need we give up in despair. But it will never come to that in the United States.—*Western Rural.*

HEREDITARY ENTAILMENT OF PECULIARITIES.

Dr. Manly Miles, in his excellent work on stock breeding, gives a number of cases where accidental deformities become perpetuated in the progeny; one of a man with a singular elongation of the upper eyelid, whose seven or eight children in a family of ten had the same deformity; of a man having an extra finger on one hand, whose progeny were similary affected, the extra digits appearing on both hands and on the feet of the second and third generation, and on all four of the extremities in the fourth; of a ram in Germany having ears of not more than one-quarter the usual size, imparting the peculiarity to a subfamily, members of which appeared in the United States between 1824 and 1828, one came to New York State, and his owner David Ely bred a flock from him with the ears almost entirely bred off; of a family of short-legged sheep produced from a ram born with abnormally short legs; of a hornless bull produced in Paraguay, which has been the progenitor of a race of hornless cattle that has since multiplied extensively in that country; of families of one-eared rabbits bred from parents that accidently lost an ear, and of families of pigs that became tailless soon after birth.

A Dr. Coventry of Edinburgh reports having a cat that was perfect at birth, but lost her tail by accident when young. She afterwards had many litters of kittens, and in every one of these there was one or more of the litter that wanted the tail either in whole or in part. Prof. Miles says it is stated on good authority that animals that have been "branded" in the same place for several successive generations, transmit the same mark to their offspring. In some of the instances given by Dr. Miles the peculiarities of bodily deformity appear to have been transmitted nearly or quite as readily, and as surely, through the mother as through the father.

Turning over a few pages in the same number of *Wallace's Monthly*, from which we have quoted above, we find two cases given where injuries have been transmitted in a remarkable manner. The first the case of a ram that got a grass-seed into the corner of one of his eyes which caused much inflamation and enlargement. In this condition he was turned with the ewes and became the sire of thirty-four lambs, twenty-seven of which were defective in the left eye just as the sire was. The second case was that of a bitch that had one eye so severely injured that she became blind in that eye. Her first litter of pups born while the socket of the eye was sore, were nearly all blind of the same eye as the one injured in the mother. The second litter had fewer affected, and after the eye was entirely healed her pups came with perfect eyes. Mr. Wallace well remarks, "we can learn anew from these two instances how little we know of the secrets of the womb."

We may add in this connection that Maj. Henry E. Alvord has made a public statement that he has known a herd of horned cattle to be changed to polls by a presistent removal of the incipient horns from the heads of the calves. The proportional number of permanently polled calves increased with each generation till the herd became practically a hornless family. Secretary Russell also states that our bald headed sheep originally all had horns, while now horns are only found on the rams.—*N. E. Farmer.*

Where Oxen are of Value—Oxen are better adapted to slow, heavy work, especially on rough land, than are horses. They serve equally well for common farm labor and are more easily raised. Oxen become more valuable as they gain in size and weight, and may be sold for beef when no longer fit for work. Horses work faster and are therefore more profitable on farms that are easily tilled. A good plan, and one practiced by many, is to keep a yoke of oxen for slow, heavy work and save the horses for labor better suited to them.

Some Farmers always have good crops, good stock and good prices. It is because whatever they put their hands to they do well. They farm with brains as well as hands. If other farmers would imitate their example they would have better crops. Success does not depend so much upon good luck as it does upon good work.

How to Disappoint a Balky Horse.

Fitchburg (Mass.) Sentinel: A Leominster farmer recently broke his horse of a "balky" freak in a very quiet and, as he claims, not a cruel manner. His horse is in excellent flesh and shows no signs of neglect on the part of his master. He drove him, attached to a rack-wagon, to the wood-lot for a small load of wood. The animal would not pull a pound. He did not beat him with a club, but tied him to a tree and "let him stand." He went to the lot at sunset and asked him to draw, but he would not straighten a tug. "I made up my mind," said the farmer, "when that horse went to the barn he would take that load of wood. The night was not cold. I went to the barn, got blankets and covered the horse warm, and he stood until morning. Then he refused to draw. At noon I went down and he was probably hungry and lonesome. He drew that load of wood the first time I asked him. I returned and got another load before I fed him. I then rewarded him with a good dinner, which he eagerly devoured. I have drawn several loads since. Once he refused to draw, but as soon as he saw me start for the house he started after me with the load. A horse becomes lonesome and discontented when left alone, as much so as a person, and I claim this method, if rightly used, is far less cruel and is better for both horse and man than to beat the animal with a club."

THE DAIRY.

INJURIOUS MILK ODORS—HOW TO PREVENT OR GET RID OF THEM.

At the ninth annual meeting of the New York Dairymen's Association the subject of disagreeable and injurious odors in milk was brought up by B. D. Gilbert, who stated that a friend had a dairy which produced the richest of milk, and, although the milk was rich, it smelled very strongly of the stable, yet everything about the stable was perfectly clean. Why should that milk smell so strong of the stable, and be so disagreeable to drink?

Prof. Arnold remarked in reply as follows: "You may lay it down as a certainty that the stable is not properly ventilated. An animal will take in an odor into any of its liquid secretions at once, and most readly through its breath. A cow barely smelling of onions will have onion taste in her milk immediately. I saw last summer a cow tethered to the leeward of a lot of onions, and in a little while her milk tasted so strongly of onions that it was unfit to use."

"A cow going into a stable filled with air permeated with the odor from solid and liquid excrements, will inhale that effluvia and carry it into her milk in fifteen minutes after the exposure: You can not only smell the odor, but you can taste it. Winter milking demands proper ventilation of the stables."

"Stables should be so ventilated that the air designed for ventilation should come into the tie-up in front of the cows, and go out upwards behind them. Most people ventilate at the rear of the cows, thus driving the effluvia from the offal past their heads into the middle of the cow-barn, going up and passing off in that way. Others shut the cows up so tight that the odor cannot get away. Then the air becomes loaded with it, and it is carried into the secretions as effectually as though you had taken some of the offal and thrown it into the pail, or the cow had put her foot into the pail."

"I went into a very expensively-built stable a few years ago, where no outlay had been spared in the arrangements for getting rid of the manure and for keeping

the cattle warm. The most convenient arrangement was made for feeding ensilage, but the windows were kept behind the cows, and ventilation passed off in front of them. I suggested to the owner that this was the reason why there was a stable taste in his milk, butter and cheese. I informed him that the air should come in at the cows' heads, and go out loaded with foul matter where it would not reach the nostrils of the animals. It is a health-producing cause to have fresh air come in front of individuals or animals."

"Cows exposed to this impure air may be turned out and milked in the open air and it will still have the objectionable flavor. You may take such milk in a bottle as drawn from the cow and carry it out of the stable, it will still have the bad flavor. I have taken it into my mouth from the cow and it had the objectionable taste.'

Major Alvord disagreed with Prof. Arnold, believing the milk far more susceptible to taint from the air than through the animal. He believed it comparatively easy to deoderize and disinfect the milk after coming from the animal. He believed that although an animal may have become tainted, the milk would be free from odor and taint if the animal were milked in the open air where there was a good stiff breeze. Tainted milk, if from odors, may be purified by thorough oxidation, through milking in the open air, or, if that be not practicable, by airing and cooling the milk. Faults of feeding or ventilation may render milk through a tainted atmosphere extremely disagreeable, and spoil it, yet it may be perfectly good in case it is drawn in fresh air under proper conditions.

EDITORIAL BRIEFS.

FIRE AND WATER.

Several extensive fires have lately taken place in our country. One at Eastport, Me., and one at Salisbury, in on our own State, have proved very disastrous. The overwhelming waters at Sabine Pass, Texas, have caused large destruction of life and property. One of the earliest lessons to be learned is that these elements, "fire and water" are good elements, so long as they are kept under perfect control, but they are fearful masters, if once they get the upper hand of us. The most perfect care should be exercised in the use of fire or any highly combustible material, coal oil. The great inflammable substances used in towns where gas is not yet introduced, should be handled with the utmost care, and the law should surround it with such safeguards as will protect the community from its dangers.

OUR FORESTS.

The destruction of the forests of our country is beginning to cry aloud for some hand to stay the work of devastation. The amount swept away by careless fires in the forest cannot be reckoned at less than millions of dollars. This, together with the amounts manufactured into lumber, is depleting our country of its native forests. It is acknowledged generally, that less than a score of years will suffice to sweep away all the fine trees in our lumber regions; unless some means is taken to lessen this demand upon them. It has been the desire of several foreign nations to bring their lumber into the U. S. duty free, and we think this would be one method of retarding the consumption of our own forests. Give them this privilege even if it lessens the price of common lumber to the extent of preventing the manufacturers of it at home.

GIVE US PLENTY OF EGGS.

Cholera among swine, pleuro-pneumonia among cattle are causing many to eat much less meat than formerly. The demand has so far decreased that butchers are getting rich much more slowly than for years back. The stagnation in their business is not wholly from the introduction of western dressed beef and pork; but from the general unwillingness of the people to run the risk of getting diseased meats. The best substitute for meat is to be found in eggs, and the supply of eggs, always

below the demand, does not promise to be at all adequate for months to come. It will certainly pay poultrymen to take the very best possible means to secure eggs during the coming winter. The price promises to be very high, and the stock is very short already, this early in the season.

HEATING FARM HOUSES.

For some time yet, in our Eastern part of the country, farm houses will probably be heated by wood cut on the farm. The time is rapidly approaching, however, when coal will be depended upon as the chief fuel. We can remember the large fire places and huge eight foot logs which were piled therein to give us warmth in in winter, years ago. Now such generous use of wood is scarcely known, and not many are the common fire-places where an open fire delights us with its cheerful blaze. Already, we see the Farmers' teams at the railroad stations, loading with coal, and the close stove is becoming a common object in the Farmers' homes. If coal must be burned, no doubt the stove standing well out into the floor, is the very best means of warming the house, which can be invented. The furnace in the cellar will do well for city houses; but the Farmers' cellar is too valuable an appendage to be spoiled by a furnace, with its artificial heat.

LEISURE HOURS.

The Farmer's leisure hours are approaching. Not that the winter brings him no labor; far from that. The winter gives him a few hours of comparative leisure when compared with his spring and summer and autumn labors. During the winter evenings, when no wearisome cares are on his mind, he should occupy his time in the way to bring him and his family the greatest comfort and enjoyment. And how shall this be done? 1. He should visit his neighbors and have his neighbors visit him. 2. He should, with his family, each month attend some gathering of the Farmers for the discussion of farming subjects. 3. He should read at home, some interesting literature, books and papers of such a character as will benefit, elevate and inform him. 4. He should think over plans for the coming year's work and put them in writing in his memorandum book for handy reference. Plenty of pleasant occupation may be found for his leisure hours.

1900 ACRES OF SWEET CORN.

The farms owned by Mr. Louis McMurray in the vicinity of Frederick City, Md., contain about 1900 acres of fine land, all devoted to the growing of his celebrated sweet corn for canning at his immense factory. Frequently is to be seen in cultivation a single field of eight or nine hundred acres. These tracts of land were purchased by Mr. McMurray at an average cost of about $100 per acre and are kept in the highest state of cultivation. They are now valued at nearly double their original cost.

One mode of manuring these lands is the turning under of green crops. The last time of running shovel plows amongst the corn, he sows millet, and after taking off the corn, the millet is turned under. He also sows rye to be turned under, which, with other fertilizers, keeps all the farms in this high state of cultivation. Looking at such an immense crop of sweet corn one would naturally ask, what will he do with it? By going to his factory in the city of Frederick you will soon learn what becomes of this corn. This canning establishment covers five acres of ground, and is said to be the most extensive corn-canning factory in the world. When in full operation, it employs nine hundred hands and puts up from 3,000,000 to 4,000,000 cans annualy. In looking over

the canning books showed us, we observed that they packed from 600,000 to 800,000 weekly, the machines running by steam to cut the corn from the cob; Mr. McMurray informed us that each machine could cut 60,000 ears in a day of ten hours. To carry on this immense business, each branch has its own apartments complete, and one of the largest, as will readily be inferred, is for the making of the 3 to 4 millions of tin cans. This is all done by machinery upon the place. The cases for packing are also an item of importance, with a saw mill complete and box making machinery; also machine shops, blacksmiths shops, ice houses, store houses, stables, silos, &c., all within the enclosure of five acres.

What was most wonderful and pleasant to us was too see how sweet and clean the whole place was kept. Before going to the factory we had heard that there was much sickness in Frederick and some of its citizens were under the impression that this packing establishment was the cause of the sickness. On visiting the premises their fears would soon disappear. Few kitchens are kept more sweet and clean than this whole establishment. From the packing of so large an amount of corn, as a matter of course, there will be a large amount of offal, and we found upon the place a Silo about 100x40 and twenty feet deep with two divisions making three apartments. This silo is built of solid stone work from bottom to top and cemented. Two of the apartments were filled with the husks from the corn and well weighted with stone upon the top. Outside of the silo was a pile of husks and cobs about 100 feet square and 10 to 20 feet deep; this pile will be removed to the farms, and what is not eaten by the stock will be used as a fertilizer upon the land. It is less than twenty years since Mr. McMurray first commenced farming and corn packing in Frederick, and now the business seems to be the life of old Frederick. This year's immense crop, Mr. McMurray told us, was all sold, and 47,000 cases (24 cans to the case) were already delivered. He is now loading 3 cars daily, and it will at that rate take him until the middle of December to get all shipped.

We would like to mention many other items of interest in connection with his farms and factory which attracted our attention, but find we must defer it until some future day. W.

FREDERICK AND OTHER FAIRS.

The Agricultural Fairs of the present year, which were fortunate enough to have good weather, and they have generally been favored in this respect, have been well attended and have proved to be successful. Early in the season we attended the fairs in the Eastern States, including the great New England Fair at Bangor, and found everywhere a spirit of enterprise which had brought out large exhibits and a correspondingly large attendance.

Most of the fairs in Maryland which we have been able to attend have been excellent; having challenged our admiration for their good management, and the energy and ability with which they have been conducted.

The Frederick Fair, held from the 13th, to 16th, of October, was an exceptional success; and as we were able to spend quite a season on the grounds, we will give here some especial items which struck us as commendable. The Society deserved the success it achieved. We have never met with any body of managers, at any fair, who worked harder or did more to make exhibitors and visitors comfortable, satisfied and happy. The President, Secretary, Executive Committee, in fact from the highest officer to the humblest employee, all strove by every means to make the occasion enjoyable to every one

on the grounds, and they have thus made themselves very popular with the public: and, if re-elected for the year to come, the Fair of 1887 will no doubt be a grand success; for with such men there is no possibility of failure.

The exhibition, in all its various classes, was full and of good quality. The exhibit of horses and cattle was very large, every stall upon the grounds being taken. The show of hogs and sheep was very good, also. The display of agricultural implements and machinery was not as large, perhaps, as it has been in some former years, but consisted of a greater variety and was of the very finest quality. The Household Department was full and the best we have ever seen at this County fair. The show of poultry was the best we have seen in the State this season. Of vegetables and seeds the display was attractive, and a great variety of carriages filled the building appropriated to this class of articles.

The Races were said to be good; and the Tournament seemed to interest both ladies and gentlemen and was watched and cheered by all present. The Military made a fine display. Among them were: Baltimore Light Infantry, Col. Barry, 160 muskets and drum and bugle corps. The companies were commanded by Capts. Shryock, Haupt, Robinson and Wannenwetch. The staff officers were Quartermaster Moore, Commissary Perkins, Surgeon Norris, Paymaster Pennington and Adjutant Browning.

The Talbot Guards, Capt. Roberts commanding. Lloyd Guards, of Cambridge, Capt. James Wallace. Waverly Guards, Cap. Wardin. Hagerstown Light Infantry, Capt. Lane. Bond Guards, of Catonsville, Capt. Barnette. The Frederick Riflemen, Capt. Beckley, with Frederick Cornet Band. The Linganore Guards, Capt. Danner.

Side shows, dice shakings, and other gambling schemes, we are sorry to say, appeared to be well patronized, and we should think they were fully up to any former shows; an item to which we cannot give our approval. The attendance was large and the Fair a grand success. It wound up with a ball on the closing night of the exhibition.

PREMIUMS.

The Society was liberal in granting premiums on horses, cattle, hogs, sheep, poultry, &c., and we give a few of the awards on machinery.

E. Whitman Sons & Co., awarded premiums on the following goods: Field Roller, Lawn Mower, Horse Power, Balto. Hay and Straw Cutter, Young America Corn and Cob Mill, Montgomery Wheat Fan, Reids Creamery and Butter Worker, Swing Churn and Johnson's Manure Spreader.

A. B. Farquhar had a good display and was awarded premiums on Thresher, Cleaner and Separator, Cider Mill and Press.

Spangler Mf'g Co., were awarded premiums on Corn Planter, Grain Drill, Lime Spreader and Corn Sheller.

Baltimore Plow Co., E. B. Whitman, President, had an exhibit of Farm Wagons, Plows, Harrows, on which they received premiums.

There were other awards that we would like to mention, but have not the space to do so.

THE BAY STATE FAIR.

The first fair of the Bay State Agricultural Society has been a success beyond the expectations of its most hopeful members. It was the aim and determination of the executive officers that this fair should excel in character if not in extent any agricultural fair ever previously held in New England. It has excelled in both quantity and quality. The Bay State has

shown that a great fair can be held and be well patronized without a horse trot to draw a crowd. The Bay State has gone a step further and proved that a great fair can be held and be well patronized without liquor or beer selling; also without gambling stands, without lotteries, without side shows of fat women, tall men, six-legged calves or three-legged hens; without any shooting galleries or artificial "nigger" heads or rag babies to throw balls at for cigars; without a balloon ascension, a bicycle tournament or a ball game; without a president, governor, congressman, lawyer, clergyman or would-be officer holder of any sort to make speeches, and without a procession, pompous parade or imposing ceremony of any kind whatever which have been considered so indispensible in many other societies.

The premiums were paid promptly.

	Attendance.	Receipts.
Tuesday	8,000	$4,000
Wednesday	20,000	8,000
Thursday	30,000	10,000
Friday	25,000	9,000
Saturday	20,000	9,000
Total	103,000	$40,000
Approximate expenses		$30,000
Approximate balance		$10,000

New England Farmer.

[Ed.—The MARYLAND FARMER has for years advocated the abolition of the very objectionable features mentioned in the above account of the Bay State Fair. When no other publication took exceptions to these objectionable appendages to our agricultural exhibitions, we have from month to month called attention to them, and urged the managers to prohibit them. In our own and other States we have been pleased to see that many of our best fairs have adopted to some extent our suggestions, and it is with feelings of gratification we place the above in our columns to show that our position is appreciated. Will not this exhibit give a renewed power to those who are in favor of having the influences at our fairs, always of the best character?

Farmers National Congress.

Having been appointed by the Governor of Maryland one of the delegates to the Farmers' National Congress which lately assembled in St. Paul, Minn., it was a source of extreme regret that unavoidable circumstances deprived us of the privilege of attending. Nothing could have afforded us greater pleasure than to have visited the great and growing Northwest, which has already become one of the important sections of the country. Our recent visit to Chicago on a similar mission gave us a pretty vivid idea of the progress and resources of that region, but we should have extended our trip this year to the great Mississippi.

The next regular session of the Congress will take place in Chicago during November 1887. Baltimore was named, and the suggestion received considerable favor. We should have been much pleased if our good city had been selected so that the delegates might have had the opportunity of enjoying the proverbial hospitality of our citizens.

There will be an adjourned meeting held in Washington, D. C. during January 1887.

Below be give, from the *St. Paul* (Minn.) *Globe*, some extracts of the proceedings, and a short synopsis of

PRESIDENT BEVERLY'S ADDRESS.

"This is the fourth time I have addressed you as president. Since our last meeting all industries have been passing through a period of depression. A pressing necessity demands that we shall propose some definite line of organization and action for the approval of the masses of our calling in every State and Territory of the Union.

"The resolutions adopted at your last meeting were presented to the government through the proper channels. Your committee were received and heard with due respect, and your measures favorably reported to congress. There they sank out

of view beneath the dark seas of personal and partisan politics. What shall we now do is the question to be met and decided by this body. There is but one course. We must press straight on. We know we are right, and now let us demand our rights. I recommend to you that we do now, with added emphasis, reaffirm each and every one of your former resolutions, and present them again to the consideration of the government, and respectfully but earnestly insist upon their fair and full consideration and discussion in a manner satisfactory to an intelligent people. We must face this issue like men. Now or never we must act; tomorrow will be too late."

The following resolution was offered by Col. J. Carroll Walsh, of Maryland, and referred to the committee on resolutions:

"*Resolved*, That the city of Baltimore, from its geographical position, being considerably nearer to a great commercial centres of the West and Northwest than any other Atlantic city, and said city possessing exceptional facilities for receiving, storing and exporting the agricultural productions of this great and growing section of our country, and at the lowest possible cost, this Congress of Farmers would respectfully ask that the favorable consideration of the national government should be extended to the construction of a free ship canal from the Chesapeake to the Delaware bay, which work would shorten the time between the port of Baltimore and Liverpool, England, at least one day, if not more."

Mr. Outerbridge Horsey, of Frederick county, represents Maryland on the committee on resolutions.

The Farmers' Congress on Friday was occupied in debate on various resolutions. The following was unanimously adopted:

"*Resolved by the Farmers' Congress of the United States*, That the Congress of the United States be, and is hereby requested to pass an act creating the office of secretary of agriculture, with all the emoluments and privileges of other cabinet officers."

The second resolution recommended the the extension of the signal service as far as the telegraph reaches with flag signals, etc. Gen. Le Duc offered an amendment that the service be transferred to the department of agriculture when this was created, but the amendment was laid on the table and the resolution adopted.

The next resolution was called for appropriation of $3,000,000 by Congress for stamping out contagious diseases among domestic animals, and urging the Legislatures of the different States to adopt laws carrying out the idea. It was adopted without debate.

The resolution requesting the State Department to instruct its representatives in France and Germany to use their influence to relieve the embargoes on American products was adopted without debate, as was the resolution favoring the speedy development of the water-ways of the whole country for the benefit of the industrial, commercial and agricultural interests.

"*Resolved*, That each delegate to this Congress is requested to urge local organization among the farmers of their respective districts.

The delegates to the Farmers' Congress were tendered an extended excursion by the railroads centering at St. Paul over their respective lines, embracing most important portions of the Northwest. Most of them in attendance accepted. The ladies accompanying the delegates were included in the invitation.

The Excursion.

The hour named for leaving St. Paul was 7.30 a. m. After a run of 20 minutes Minneapolis was reached, where the excursionists had an excellent opportunity to view from the great stone arch bridge, the Falls of St. Anthony, the falls, however were not a striking success as there was a painful lack of that most necessary accessory to a well regulated cataract, water, that element having been diverted for the use of the numerous flour mills on either bank, leaving a bare expanse of board where the falls should be with only a small trickling stream of water here and there over the broad expanse. After a short stay the train sped through the beautiful forest region with scarcely a stop until St. Cloud, of tornado notoriety, was reached at 10 a. m.

After a short stay at St. Cloud the train bore its load of humanity onward and on without stop, through Central Minnesota with its beautiful groves of hardwood

and smiling prairies, and as the train in rapid succession passed by or through the many beautiful lakes characteristic of the Park Region, constant expressions of wonderment and pleasure were heard from every side.

At 3 p. m. Barnesville, the dinner station, was reached, where a pleasant hour was spent by the hungry multitude, discussing the first-class meal prepared by Mr. Weatly, of the railroad dining station. After leaving this place the Red River Valley was entered, and an opportunity given for the first time to many, especially those fine and genial gentlemen from the Southern States to view the grain fields of this justly famous farming region. At Lockhart a stop was made and the famous 7,000 acre grain and stock farm of Springer Harbaugh was visited.

After leaving Lockhart, it had been arranged that the night should be spent at Grand Forks and here the excursionists received the same hospitable treatment, being provided at the hotels and private houses for all free of charge.

After leaving Grand Forks, rapid progress homeward was made during the afternoon, and at 1.10 a. m. Saturday, the tired, but happy excursionists arrived at Union depot, St. Paul.

To the Editor of the Maryland Farmer.

ROCK HALL, Kent Co., Md.

The growing season of '86 is drawing to a close, and it has proven rather an unfavorable one to our farmers. So many of whom have most of their farms in fruit. The early part of the season bid fair for a large peach crop as many new orchards came in for the first time and there was a full supply of blossoms and young fruit, but later on, the fruit failed to mature and many farmers lost thousands of bushels by rottening and falling. The crop of '86 can be set down as a general failure, and the same can be said of corn, certainly on all land not rolling for the excessive rain during May, June and July kept the plow and cultivator out of it, and without abundance of air and moisture loaded with carbonic and ammonia to reach the roots there can be no crop of corn. On a field of my own that I know was good for fifty bushels per acre, not twenty will be husked; and much of it mere nubbins. The cultivator made but one trip on this field, so thoroughly saturated was it with water. Another small field I entirely abandoned and turned the stock in, and in a short time not a sign of the corn could be seen above the ground, although fine pasture was at hand for the stock; proving how sweet the sap must have been and offering the best of testimony in favor of sowing corn for fodder and cutting before the cob and grain are formed. Of its great value I speak from experience, and it is hard to tell how much of it can be raised on an acre of good rich *porous soil*; porous, so that the great elements of plant food, moisture carbonic acid, and ammonia, which being movable elements a favorable season will supply abundantly, may be fully appropriated. The application of the mineral elements of which such a small supply is necessary, is an easy matter.

The effect of powdered carbonate of lime, which you so plainly observed last year, continued this year and early in the season the figure of "June 4" could be seen. I have heard of its good effect from other quarters and have no doubt a mixture of S. C. Floats, powdered shells and corn meal would prove a valuable mixture for corn upon this theory. The meal (organic matter) would soon pass to an organic acid and this in turn would unite with the lime and set free the carbonic acid mingling it with the soil; and being a powerful solvent of mineral matter the roots would find it in a condition to pass through the cells of the plant in solution, for in no other condition can mineral matter be utilized. Water saturated with this acid is nature's great universal solvent, and it is well to imitate nature.

During the past season I introduced water to each of my horse troughs so they could have a constant supply night and day, and I can state with great confidence that the old proverb "a horse well watered is half fed," is true. The supply is autimatic and so quickly does it work that one drink of a horse will start a fresh supply, all the troughs being connected. During the summer one of my amusements was to watch the horses eating their hay, and I have often seen them take a small bite, dip it in the water and slowly chew it, and at regular intervals take a small drink.

My tank being adjusted with a guage it is easy to see how much they will drink in a day, and having observed it from 5 o'clock yesterday to six this morning I find five horses drank 32 gallons. One can imagine how much they would have suffered without water.

My own observation as well as the one who feeds them is that they have not eaten half as much hay and far less grain than formerly, and one fact is beyond dispute, they have never been seen in such a good condition. Too much cannot be said in favor of a plentiful supply of water at all times; especially during the long winter nights when so much dry fodder is eaten.

Water is the great solvent, not only for the matter that forms blood, that circulates through the arterial system; but is equally important as a solvent for the feacal matter so it can pass rapidly through the intestines, thereby preventing any absorption of it, which often poisons the blood.

The same demand for water prevails with all animals and if one will watch a yard of chickens, he will be surprised to see how much is necessary to keep them fully supplied, when not on grass, of which at least three-fourths is water. I have no definite information how much a hen will need for a full supply ; but I can with some degree of certainty say, it will average over two ounces per hen, as I have known 150 drink 2½ gallons in the twenty-four hours.

The moral of my story is "animals well watered are half fed." For a full supply of water where wells offer the only means of obtaining it, I cannot say too much in favor of wind mills, a twelve foot mill does my grinding and pumping with a very moderate wind.

Our village is rapidly increasing and at this time five new houses are going up and most of the residents own their own homes and to this result the absence of the whiskey shops have been the chief factor, and year after year local-option grows stronger and stronger with all classes. A. P. S.

THE average yield of wheat per acre in Missouri has run down from twenty-five bushels per acre on virgin soil to eleven and a half bushels, the average in the State for the past ten years.

PLEURO-PNEUMONIA.

The suppression with a view to the extermination of Contagious Pleuro-pneumonia is a subject of deep interest to the Maryland Farmers, and our readers will be pleased to hear that we have been favored with a concise report from our State Veterinarian, Dr. Ward, in reply to a request from us, and as usual he is ready to furnish any information we seek which may be of interest.

It appears that in August last the Bureau of animal Industry made arrangements with the Live Stock Sanitary Board, which received the Governor's approval, to place a number of experienced Veteranary Inspectors under Dr. Ward as Assistant State Inspectors, to make a stable to stable visit throughout the City suburbs, and after that a farm to farm visit throughout the counties. The inspection of every animal on all premises visited has taken place, and all cows showing evidence of the disease in its chronic form have been valued and slaughtered, the value being paid out of the sum granted by Congress for the purpose.

Some three hundred head have been slaughtered including some at different farms in Baltimore, Howard and Calvert Counties. The work was arrested by the outbreak in Chicago, through several Inspectors having to make a stampede for that field of havoc. The work is however being steadily proceded with by Drs. Wray and Dyer, with Dr. Ward's former protege, D. E. Keller, who under Dr. Ward has learned the ropes so as to be a good help to the Veterinary Inspectors, who are strangers here.

Dr. Ward says the U. S. Bureau will pay for all animals actually diseased, and that he on behalf of the State condemns all that have been in contact with diseased animals, when in his judgment it is desirable to do so.

The Supplementary Act which makes it penal for any one practising Veterinary medicine in the State to hide the fact that he has knowledge of any case of contagious or infectious disease has proven a good help to Dr. Ward in obtaining information held back, which the Act was passed to remedy, and wholesale indiscreet inoculation as well.

The Live Stock Sanitary Board has proven a great help also, and Dr. Ward emphatically said the report on the condition of the Live Stock of the State will be equal to any, if not better, than any other State, speaking from his views of correctness of data.

Extracts from Notes Taken at the Farmers' Club.

The stereotyped and very common expression that is often heard from people who little understand what they are talking about, when they say that Maryland farms are worn out and are not worth reclaiming, is refuted every day in this section of the State by those who witness the results that have been achieved by many farmers during the few past years. Perhaps one of the strongest instances in point is the fine field of clover now on the farm of Dr. M. D. Hume, where three years ago it was bare clay, and of such character, that a stranger, unacquainted with Maryland, would have hesitated to accept it on an agreement which would compel the purchaser to pay taxes on it. The first year, he ploughed, limed, and planted to potatoes, getting crop sufficient to pay for labor and fertilizer. The second year he sowed it to wheat, plowed under, following with oats, and has now as fine and promising a field of clover as can be seen in many of the sections of the Northern States. What makes the case so striking to the beholder is the dividing line in the tract which indicates where the improvement ends. The old, untouched portion looks as dreary as any spot in the poorest of the poor lands in this vicinity.

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Another case is quoted also in the farm of Mr. Stephen Gambrill, adjoining Laurel, down toward Cherry Lane. The inhabitants hereabouts will recall a piece of land once over-grown with briers, brush, and alternating with bare patches of unprofitable clay. To-day it is one of the finest clover fields that would be found in many a day's travel.

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The President of the Club, Mr. Kinsolving, also, has rescued land on his farm, which at the time of purchasing would readily have been classed with the "laughing stock adventures" of problematical farming.

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The use of lime on these old and bare soils proves one thing conclusively, that let the land be as old and so-called worn out as it may, there is still inherent in the soil, that which the lime agitates and quickens,—a something that was never exhausted by such crops as they have heretofore been taken away.

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Mr. J. D. Cassard, also reported a singular experiment. Last winter he limed a field with Frederick county stone lime, excepting a three-quarter acre plat, which he treated with oyster shell lime, burning it himself. The care had been the same on both, and the treatment uniform. The land was stiff over the whole field. That portion treated with the Frederick lime produced by far the best results, so much so, that the dividing line was clearly and unmistakably visible. The gentlemen of the club had always agreed that oyster lime was quicker, and it has been claimed that it was the best. This experiment will surprise many of our readers along the lower Potomac shore, for it is there conceded that after properly burning oyster shell lime, which, in itself, contains additional strengthening qualities over stone lime, it has this further claim, that the great quantity of wood ashes necessary to reduce them supplies an additional reason for using the oyster lime in preference.—*Free Quill.*

We have received from Smith, Powell & Lamb, Syracuse, N. Y., a fine picture 24x30, of the Chlotilde Family of Holstein cattle, beautifully engraved from the original of C. Palmer. The five animals make an attractive and life-like picture.

We publish below a letter from Commissioner Colman with his description of the potato rot, and his inquiries in regard to the same. This is a matter of great importance, and any Farmer who has any information on this subject should communicate with the Commissioner at Washington, D. C.

UNITED STATES DEPARTMENT OF AGRICULTURE.
WASHINGTON, D. C., OCT. 1, 1886.

DEAR SIR:—In investigating the potato rot, it has been found desirable to obtain a more extended and complete knowledge of its distribution and of the losses occasioned thereby, in various parts of the United States. With this end in view the following questions have been prepared, with the full assurance that the great economic importance of this subject will be sufficient to insure your prompt co-operation.

Very respectfully,

NORMAN L. COLMAN,
COMMISSIONER.

POTATO ROT.

The potato rot is caused by a parasitic fungus, *Phytophthora infestans*, which grows in leaves and stems as well as in tubers. Ealy in the growing season the external threads of the fungus, may be detected on the stems and leaves of the potato in the form of patches of fine white mould, which causes, later on, a more or less extensive browning and decay of these parts. The rot of the tubers may be either dry or wet, and many continue after the potatoes are dug and housed. The disease has been known for many years. It is present each year, but is disastrous only in exceptional seasons. It is believed to be worse in wet than in dry weather; on low lands than on uplands; on clay soil than on sand; in thin-skinned white varieties than in thick-skinned red ones.

1. In your country, about what per cent. of this year's potato crop was destroyed by rot?

2. What per cent. of lasts year's crop was so destroyed?

3. About what per cent. of the harvested crop of 1885 was lost during the winter and spring by a continuation of the rot in cellars and storage pits?

4. Were any varieties entirely free from rot, or freeer than others?

5. Was the season in 1886 wet or dry? In 1885?

6. Did early or late varieties rot most?

7. Did you observe any instances in which location (wet or dry), or quality of soil (sand, loam, clay, etc.) affected the severity of the disease?

8. Did the weather (cold or hot, wet or dry) exert any marked influence?

8. What remedies or means of prevention, if any, did you try? and with what results?

[In case there was no rot, your statement to that effect will be of use.]

To the Editor of the Maryland Farmer.

LABOR ON THE FARM.

Having had considerable experience with farm hands, and seeing and hearing a great amount of complaint from farmers on this point, I just write these lines about my own in the hopes it may be of use to others. I have been in the habit for some years of hiring my men by the year and paying by the week—that is I furnish them *house, fire-wood and vegetables*, (and 1 qt. of *milk per day*,) and pay from $4.00 to $7.00 per week according to ability. They are given to understand that they have a permanent home and constant work wet weather as well as dry. If my crops are good and the farming successful I give each some $10.00 to 15.00 for their extra exertion.

The result has been this, I have good men and willing to do a good day's work and careful of my teams and stock. My salesmen exert themselves to get the best prices for all they sell, one retails my milk, the other wholesales the vegetables and fruit I have, and the teamster sells the heavier produce, and one or two others, with myself, work and manage to keep the place going.

In the winter season we always have plenty to do, such as making roads, getting leaves, attending to stock, hauling and spreading manure as fast as made, on wheat or timothy sod.

I am now busily engaged in putting in good floors in my various sheds and making dry walks around them. By following this plan I get my work done much cheaper and at the right time. I make my own manure, and do not have to go outside of the farm for it, except for lime, plaster and some little fertilizer. By manuring the wheat thinly in the early fall with good rich manure I got a heavy crop of wheat and a splendid set of grass, and if wheat is low my money does not all go to pay fertilizer bills.

Another thing my men often take flour and corn meal, a hog or so and a portion of a steer, all these little things help to swell the aggregate amount produced from the farm.

Machinery and fertilizers have much to do in making worthless farm hands, the work with machines is quickly gotten through with, but the farm is getting poor and the farmer poorer all the while. Protect the farm, make a market for your produce and sell direct to the consumer, and raise stock, good calves, hogs, plenty of vegetables, hay and fodder to feed them with, and then work with your men early and late, and don't expect by joining organizations, however good they may be in their way, will make any one a successful farmer—for they will not.

I find that a good farmer can most always get good men—the one beget's the other. Sell your *own stuff* and pay your men promptly, and you can make a good living, keep good hands and make the farm productive.

Plains, Md. F. SANDERSON.

HAGERSTOWN FAIR.

We very much regretted that we were unable to be present this year at the Hagerstown Fair, as we have always enjoyed ourselves exceedingly when there during past exhibitions. We give an extract, however, from the *Mail*, that our readers may have an idea of its general success.

"The success of the 31st, Annual Exhibition of the Washington County Agricultural and Mechanical Association, in connection this year with Carroll county, in our own State, Jefferson county, in West Virginia, and Franklin county, Pennsylvania, has been phenominal. As we go to press, on Thursday afternoon, the exhibition is in full operation, and it will be continued to-day, when it will close. Such a crowd of visitors as is now congregated on the Fair grounds has never, probably, been brought together in this section of the country on such an occasion as this. The weather, too, during the three days now ending has been singularly mild and delightful throughout—such a series of charming days as this the association was never before favored with. But what is particularly gratifying to our local pride is the fact, by general confession of visitors from abroad, as well as at home, that the live stock, machinery and fancy articles, together with the arrangements and conduct of the exposition, have been fully up to the highest standard, and gratify the liberal patronage bestowed upon it by the surrounding country."

A Remarkable Berry.

We have received a box of Raspberries, of good flavor, which are remarkable from the fact that they bear a crop monthly, after the first crop, until the frost stops them. The first crop is a very large one, and the succeeding monthly crops are equal to those called good bearers. It was discovered by Dr. J. T. Youster, who has propogated it, and has made arrangements with the MARYLAND FARMER for its distribution.

Any of the small fruits, which can be made to bear monthly, will fill a place hitherto unoccupied; and we will gladly be the medium of any correspondence on the subject tending to its further introduction. Those interested will address us.

AGRICULTURAL COLLEGES.

The following is an extract from an address delivered at the Forsythe County Farmers Club, Aug. 7th, 1886, at Winston, N. C.

We believe that the time has arrived when North Carolina should have an Agricultural College, where the youth of the State may acquire practical knowledge and be fitted by proper training for the vocations they may fill in the various branches of industry.

We believe that the Land Scrip Fund *donated by the general government for that purpose* should *now* be applied *as directed by the Act of Congress* and thus give us an institution where the farmers may give their children that practical, industrial training so greatly needed among them. But how and by whom is this to be done? It must be done by the farmers of North Carolina and in the same way that it was done in Mississippi, Missouri, and other States whose fund, like ours, was given to their University in disregard of the rights of the farmers and in violation of the Act of congress. We must demand its transfer from the University to a school which in truth shall be for the industrial training of our youth.

The Big Steers.

When in Maine this summer we visited the Bailey Farm to see the royal cattle; and we saw them again at the N. E. Fair, at Bangor, where they carried off the ribbons. The exhibit mentioned below of nine yoke is only one half of the Bailey herd, and the remainder are fully equal to those mentioned below, in size and weight. We understood that the entire herd of 18 yoke were sold at 10 cts. a pound, live weight.

The following is what the *Boston Globe* has to say of them:

Any one passing through Brattle street Tuesday afternoon about 2 o'clock would have seen a large assemblage of men and boys gazing with admiration upon an exhibit of Maine steers. The exhibit numbered, nine yokes of steers of the Hereford breed, owned by E. A. Bailey of Winthrop, Me. They arrived last night, and to-day will be slaughtered at Brighton abattoir for S. S. Leonard of Quincy market.

The leaders of the team, a yoke of two-year olds, tip the beam at 3900 pounds, and the three following yokes, which are four years old, at two tons each. Then came two yokes of handsome, well-rounded four-year olds, which weigh 4500 pounds, then two pair of five-year olds, aggregating 11,060 pounds, and lastly a monster yoke of the same age, which weigh an even three tons. The steers are to be consumed at the Quincy House.

The Southern Cultivator.

This *Sterling Magazine* comes to us with ever fresh youth, even though we find its birth was in the far away year of 1839. It is a large Magazine, quarto shape, of varied contents, all useful to the Farmers of our country, no matter where located, and given at $1.50 a year. Few monthlies of an agricultural character, can claim a more consistent style of articles suited to the ordinary need of the farming community. We often take it in hand, when we wish a thought in reference to that large section of our country, of which Atlanta is the thriving centre. We greet its editors and proprietors with hearty congratulations upon its exceptional success.

The September number, containing the likeness of its veteran editor, Dr. Wm. L. Jones, came to our office while we were on our summer trip, and we now express our gratification in a view of his countenance, giving us indeed an indication of the man, who has so long directed the destinies of this important Journal. As Prof. Jones, of the Georgia University, he is also making his mark.

THE LONG RUN.

"The Long Run," is the title of a late book by Miss Rose Elizabeth Cleveland, published by F. B. Dickerson & Co., Detroit, Mich: Price $1.00.

This quaint title is taken from the three last words in the concluding sentence of this novel lette, *Love always conquers in the Long Run*, and to show the truth of this maxim this treatise has been written under the garb of a story. It proves the authoress to be well educated and of a thoughtful yet imaginative mind, extensive reading and much of a book-worm. The fact of Miss Cleveland being the sister of our present President has given her great notority, but her popularity as an authoress rests upon the intrinsic merits of the work itself, which is of deep interest to the reader from beginning to the end. Its general make up reflects great credit upon the publisher—its paper, large type, double leading and unique binding render it very readable.

For sale at office of MD. FARMER, for $1.00 or $1.75 including one year's subscription to the Farmer.

NOTICE.

It is with pleasure we call the attention of our friends to one of the oldest business houses in Baltimore. The Geo. N. MacKenzie Co., having been established more than ninety years ago. Those in want of Tourist supplies, winter robes and horse blankets better give them a call. See advertisement in this number.

The old house of Noak Walker & Co., notwithstanding their great age keep fully up with the times, carrying one of the largest stock of clothing in the city. Consisting of every variety usually found in a clothing house, and at prices that at all times will be as low as found elsewhere, quality considered. Call and see them.

WHEATEN OR FLANNEL CAKES.—Mix a cup of flour with a teaspoonful of baking powder and a cup of milk to a batter, beat in one egg, a pinch of salt and a teaspoonful of butter melted. Bake on a griddle. If the batter is too thick add more milk. These should be very thin and flexible and full of little holes.

Books, Catalogues, Reports, &c.

THE SMITHSONIAN REPORT 1884, Part II, covering a large variety of subjects and with copious illustrations of the various departments of inquiry.

THE JUNE MEMORANDA of experiments at Rothamstead by Sir. J. B. Lawes.

THE AMERICAN KINDEGARTEN for October, in its new dress is attractive—monthly $1.00 a year, Fowler & Wells, N. Y.

THE CONSULAR REPORTS on Commerce, Trade, Agriculture and Manufacturers, for August and September from the State Department, Washington, D. C.

THE GEORGIA CROP REPORTS, by J. T. Henderson, Commissioner, for month of October.

THE CATALOGUE of J. T. Lovette, of Little Silver, N. J. We note the justly celebrated Small Fruit Plant business of E. P. Roe has been purchased by and consolidated with that of Mr. Lovette. The Catalogue is mailed free to all applicants who address J. T. LOVETTE, Little Silver, N. J.

BULLETIN No. 19 Agricultural College of Michigan. Notes on Tomatoes.

AUTUMN CATALOGUE of Vilmorin, Andrew & Co., Paris, France.

SHOPPELL'S Modern Houses, the quarterly number, a finely illustrated Journal published by the Co-operative Building Plan Association, New York. Single number $1.00. Yearly $4.00.

FROM the Consul of the Netherlands; the Hon. Claas Vocke, we have received two very valuable documents. 1. The account of the Pulmonary disease among the Cattle in Netherlands. 2. The Freisian Herd Book, 1886, Vol. XII, issued in the English Language only.

An excellent home-made axle grease is said to be made of two parts tallow, two parts castor oil and one part pulverized black lead.

A "bad outlook for corn," says an exchange, "has come to mean not a scarcity, but the cessation of its use by the Western farmers as fuel."

Show us where lives the farmer who makes it a rule to borrow tools, and we will show you broken gates, lousy calves and dirty stables.

CONTENTS FOR NOVEMBER.

THE

"MARYLAND FARMER"

A STANDARD MAGAZINE,

DEVOTED TO

Agriculture, Live Stock and Rural Economy,

Oldest Agricultural Journal in Maryland and for ten years the only one.

EZRA WHITMAN, Editor and Proprietor.

141 WEST PRATT STREET,

BALTIMORE, MD.

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SPECIAL OFFER.

The MARYLAND FARMER will be furnished the balance of this year, and the entire year of 1887 for one dollar, postage prepaid. Those wishing to avail themselves of this liberal offer will enclose to us one dollar in currency, check, P. O. Order or stamps, and it will have our prompt attention. The following blank may be cut out and filled up which will save the trouble of writing:

E. WHITMAN, Editor of Maryland Farmer.

Dear Sir:—Enclosed please find one dollar in.....for which please send me the "Maryland Farmer," as per the above proposition.

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